

DETAILED ACTION

This action is in response to the amendment filed 9 April 2010 and interviews dated 21 June 2010 and 28 June 1010 and subsequent proposed amendments to the claims faxed 29 June 2010 and authorization for examiner amendment on 29 June 2010.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ted Liu on 29 June 2010.

The application has been amended as follows:

Claim 1. A method for generating a graphical user interface (GUI) accepting a request in order to generate a response, comprising:

mapping [[the]] a request from a client to a control tree factory residing on a server for generating a response to a control tree factory;

generating a control tree from the control tree factory based on the request, wherein the control tree can include a plurality of controls, wherein each control of the plurality of controls is associated with a software class that represents a graphical

element of a the GUI graphical user interface (GUI); wherein each said control can be dynamically added to the control tree during a control tree lifecycle;

using a render queue to collect a subset of the control tree one or more controls of the plurality of controls that are selected for pre-rendering rendering, wherein the subset of the control tree contains one or more controls of the plurality of controls;

dispatching each control in the render queue to a separate render worker using a separate thread;

processing pre-rendering the one or more controls subset of the control tree in the render queue before the control tree is processed;

advancing the control tree, including the pre-rendered subset of the control tree, through at least one lifecycle stage based on the request and updating the control tree; and

generating the response based on the control tree that is updated, wherein the response can be used to render at least a portion of the GUI on the client a graphical user interface (GUI).

Claim 27. A machine readable medium having instructions stored thereon that when executed by a processor cause a system to:

map [[the]] a request from a client to a control tree factory residing on a server for generating a response to a control tree factory;

generate a control tree from the control tree factory based on the request wherein the control tree can include a plurality of controls, wherein each control of the plurality of controls is associated with a software class that represents a graphical element of a graphical user interface (GUI); wherein each said control can be dynamically added to the control tree during a control tree lifecycle;

use a render queue to collect a subset of the control tree one or more controls of the plurality of controls that are selected for pre-rendering rendering, wherein the subset of the control tree contains one or more controls of the plurality of controls;

dispatch each control in the render queue to a separate render worker using a separate thread;

process pre-render the one or more controls subset of the control tree in the render queue before the control tree is processed;

advance the control tree, including the pre-rendered subset of the control tree, through at least one lifecycle stage based on the request and updating the control tree; and

generate the response based on the control tree that is updated, wherein the response can be used to render at least a portion of the GUI on the client a graphical user interface (GUI).

The Prior Art of Record

Burd (US 6961750 B1) discloses:

Generating a control tree from a request, pre-rendering controls of the control tree, advancing the control through at least one lifecycle and generating a response based on the control tree update.

US 6751778 B1 discloses:

A render queue (outputting and buffering HTML text of the HTTP response that will be sent to the client's browser.)

US 20040205555 A1 discloses:

dispatching each portlet in a portal to a separate render worker using a separate thread.

Reasons for Allowance

Claims 1-11, 13, 27-37, 39 and 41-43 are allowed.

2. The following is an examiner's statement of reasons for allowance:

Independent claims 1 and 27 are allowable over the prior art of record, specifically, the prior art of record fails to disclose: controls can be dynamically added to the control tree during a control tree lifecycle; and collecting a subset of controls from the control tree using a render queue that are selected for pre-rendering, wherein the subset of controls of the control tree contains one or more controls of the plurality of controls; and

dispatching each control in the render queue to a separate render worker using a separate thread.

The respective dependent claims add further limitations to the allowable subject matter of the independent claims and are, therefore, allowable over the prior art of record. Specifically, the prior art fails to clearly teach or fairly suggest the combination of elements as recited in the claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN HEFFINGTON whose telephone number is (571)270-1696. The examiner can normally be reached on 8:30 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on 571-272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SARA ENGLAND/
Primary Examiner, Art Unit 2179

JMH
6/29/10